

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): An optimization process for radio resources allocated to an MBMS service (Multimedia Broadcast/Multicast Service) broadcast by a source to a group of mobile terminals located in a limited geographic zone that is covered by at least one cellular telecommunication network, ~~comprising~~ characterized in that the optimization process comprises the steps of:

counting the mobile terminals present in said geographic zone,

defining a first criterion representing a minimum level of reception quality by the mobile terminals of the service broadcast in said geographic zone,

defining a second criterion representing a distance between the broadcast source and the mobile terminals for using a shared channel in said geographic zone and for which a reception of the broadcast service is optimal;

establishing a signalization connection between the cellular telecommunication network and mobile terminals located in a broadcast zone that fulfill the first and second criteria;
and

transmitting the MBMS service to said mobile terminals.

2. (currently amended): A process according to claim 1, ~~characterized in that~~ wherein said signalization connection is used to count the mobile terminals of a broadcast zone.

3. (currently amended): The process according to claim 2, ~~characterized in that~~ wherein the process further comprises ~~the steps of~~:

fixing a percentage of mobile terminals that should receive the MBMS service;

broadcasting signals having a determined power level;

determining the percentage of mobile terminals that respond to signals that have been broadcast;

as long as a fixed percentage of mobile terminals has not been reached, reducing an emission power level; and

if the fixed percentage of mobile terminals has been reached, broadcasting the MBMS service at the emission power level that has been reached.

4. (currently amended): The process according to anyone of claims 1 to 3, ~~characterized in that~~ wherein said cellular telecommunication network is a UMTS network.

5. (currently amended): The process according to claim 4, ~~characterized in that~~ wherein the first criterion that represents the minimum level of reception quality is determined according

to a minimum level of received signal code power (RSCP) measured by code indicated by said cellular telecommunication network.

6. (currently amended): The process according to claim 4, ~~characterized in that~~ wherein the first criterion that represents the minimum level of reception quality is determined according to a signal-to-noise ratio E_c/N_0 that is indicated by said cellular telecommunication network.

7. (currently amended): The process according to anyone of claims 1 to 3, ~~characterized in that~~ wherein the said cellular telecommunication network is a GSM/GPRS network.

8. (currently amended): The process according to claim 7, ~~characterized in that~~ wherein the first criterion that represents the minimum level of reception quality is determined according to a parameter (RX lev GSM).

9. (currently amended): A mobile terminal aimed at receiving an MBMS service broadcast by a source in a limited geographic zone that is covered by at least one cellular telecommunication network, ~~characterized in that the mobile terminal comprises~~ comprising:

means for establishing connections with said cellular telecommunication network
in the cases:

in which a reception quality level is below a minimum level defined by said cellular telecommunication network for said zone; and

in which a distance between the mobile terminal and the broadcast source is greater than a distance established in advance by said cellular telecommunication network.

10. (currently amended): The mobile terminal according to claim 9, ~~characterized in that~~ wherein the mobile terminal establishes a connection with said cellular telecommunication network when a signal-to-noise E_c/N_0 is lower than a level that has been set in advance by said cellular telecommunication network, or when a minimum level of received signal code power RSCP is lower than a preset value.